U.S. Application No. <u>09/558,239</u> - Filed: <u>April 24, 2000</u>

Amendment Dated: April 20, 2004

Reply to Office Action Dated: January 21, 2004

In the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) A fuser member comprising a core and a layer overlying the core, the layer including a fluorocarbon random copolymer, a curing agent which cures the fluorocarbon random copolymer, the cured fluorocarbon random copolymer having subunits of:

$$-(CH_2 CF_2)x-, -(CF_2 CF(CF_3))y-, or -(CF_2 CF_2)z-,$$

wherein

x is from 30 to 90 mole percent,

y is from 10 to 70 mole percent,

z is from 0 to 34 mole percent;

x + y + z equals 100 mole percent;

the layer further including a particulate filler having aluminum oxide, having a total concentration in the layer of from 50 to 140 parts by weight per 100 parts of the fluorocarbon random copolymer, and combinations of alkaline earth metal oxides of and alkaline earth metal hydroxides or combinations thereof having a total concentration in the layer of from 3 to 9 parts by weight wherein the alkaline earth metal hydroxides include at least 6 parts by weight of calcium hydroxide per 100 parts of the fluorocarbon random copolymer and the alkaline earth metal oxides include at least 3 parts by weight of magnesium oxide per 100 parts of the fluorocarbon random copolymer; and

a siloxane polymer comprising one or more curable, silanol-terminated, polyfunctional poly(C1-6 alkyl)siloxane polymers.

2. (Original) The fusing member of claim 1 wherein the siloxane polymer comprises at least two different functional siloxane units selected from the group consisting of monofunctional, difunctional, trifunctional and tetrafunctional siloxane units, and creating an interpenetrating network to cure the fluorocarbon random copolymer forming separately crosslinked polymers, the fluorocarbon random copolymer and the fluorocarbon curing agent forming one crosslinked polymer, and the siloxane polymer forming a second crosslinked polymer.

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3. (Previously Cancelled)

4. (Previously Cancelled)

5. (Cancelled)

6. (Original) The fuser member of claim 2 wherein the fluorocarbon random

copolymer is crosslinked by bisphenolic residues.

7. (Original) The fuser member of claim 1 further including a cushion layer

on the core.

8. (Original) The fuser member of claim 1 wherein the fluorocarbon random

copolymer is nucleophilic addition cured.

9. (Original) The fuser member of claim 1 wherein x is from 40 to 80 mole

percent, y is from 10 to 60 mole percent, and z is from 0 to 34 mole percent.

10. (Previously Amended) The fuser member of claim 1 wherein x is from 42

to 75 mole percent and y is from 14 to 58 mole percent.

11. (Original) The fuser member of claim 1 wherein x is greater than 40 mole

percent.

12. (Original) The fuser member of claim 1 wherein the curable

polyfunctional poly(C1-6 alkyl)siloxane polymer is a heat-curable polymer.

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13. (Previously Amended) The fuser member of claim 1 wherein the siloxane polymer includes a polydimethylsiloxane having a number average molecular weight of from about 20,000 to about 300,000 and a polymethylsiloxane comprising monofunctional and tetrafunctional siloxane repeating units and having a number average molecular weight in the range of 1,000 to 10,000.

14. (**Previously Amended**) The fuser member of claim 1 wherein the siloxane polymer comprises a silanol- or trimethylsilyl-terminated polymethylsiloxane and is a liquid blend comprising about 60-80 weight percent of a difunctional polydimethylsiloxane having a number average molecular weight of about 150,000, and 20-40 weight percent of a polytrimethylsilyl silicate resin having monofunctional and tetrafunctional repeating units in an average ratio of about 0.8-1 to 1, and having a number average molecular weight of about 2,200.